

ABSTRACT

The present invention provides a cam lobe material that is excellent in sliding characteristics, such as wear resistance, scuffing resistance and pitting resistance, and can be advantageously used in engines to which high loads are applied, and a method of manufacturing the cam lobe material. The above-described task is fulfilled by providing a cam lobe material that is formed from an iron-based sintered alloy that contains 0.3 to 5.0 mass% Ni, 0.5 to 1.2 mass% C, 0.02 to 0.3 mass% of at least either of B and P, and incidental impurities as the balance, and has a hardness of a peripheral surface of not less than HRC 50 and a density of not less than 7.5 g/cm³. The iron-based sintered alloy can further contain not more than 2.5 mass% Mo. The above-described task can also be fulfilled by a method of manufacturing the cam lobe material, that a compression molding step and a sintering step are repeated at least twice, the compression molding step involving compression molding iron-based alloy powders prepared so as to provide the composition of the ferrous sintered alloy in a prescribed cam lobe shape, and the sintering step involving sintering the compression molded compact body, and that the sintered body is subjected to quench and tempering treatment.